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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**SUPPLEMENTAL APPEAL BRIEF**

Inventor : John C. Yundt-Pacheco  
Serial No. : 09/800,113  
Filing Date : March 6, 2001  
Title : METHOD AND DEVICE FOR FORMATTING  
INSTRUMENTATION OUTPUT

Group/Art Unit : 2171  
Confirmation No. : 2746  
Examiner : Hahn B. Thai

Docket No. : HEMA.71475

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In accordance with the provisions of 37 C.F.R. § 41.39(b)(2), Appellant submits this Supplemental Appeal Brief in response to the Office Action mailed on September 1, 2004. This brief is in furtherance of the Notice of Appeal filed in this case on May 4, 2004, and the subsequent Appeal Brief filed in this case on July 2, 2004. Pursuant to the provisions of 37 C.F.R. § 41.39(b)(2), Appellant wishes to reinstate the appeal.

Also submitted herewith is a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) and the requisite fee.

**Certificate of Mailing Under 37 C.F.R. 1.8**

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Date: 1-3-2005  
Signature: Donna Oakley  
Printed Name: Donna Oakley

The Director is hereby authorized to charge any additional amount required, or credit any overpayment, to Deposit Account No. 19-4409.

This brief contains these items under the following headings, and in the order set forth below (37 C.F.R. § 41.37(c)):

- I. REAL PARTY IN INTEREST
- II. RELATED APPEALS AND INTERFERENCES
- III. STATUS OF CLAIMS
- IV. STATUS OF AMENDMENTS
- V. SUMMARY OF CLAIMED SUBJECT MATTER
- VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL
- VII. ARGUMENTS
- VIII. SUMMARY
- IX. APPENDICES

The final page of this brief bears the practitioner's signature.

### **I. REAL PARTY IN INTEREST**

The real party in interest in the present appeal is the assignee, BIO-RAD Laboratories, Inc. The assignment was recorded at Reel/Frame 014307/0021 of the U.S. Patent and Trademark Office records.

### **II. RELATED APPEALS AND INTERFERENCES**

Appellant filed an Appeal Brief with the U.S. Patent and Trademark Office on July 2, 2004. In response to the Appeal Brief, an Office Action was mailed on September 1, 2004 in which the Examiner apparently withdrew his prior final rejection, and cited new grounds of rejection of all claims in the application. Pursuant to 37 C.F.R. § 41.39(b)(2), Appellant wishes

to reinstate the appeal, and this Supplemental Appeal Brief is filed in response to the outstanding Office Action.

### III. STATUS OF CLAIMS

Claims 1-8 remain pending in the application. Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,437,024 to *French* ("*French*") in view of U.S. Patent No. 6,665,081 to *Suzuki et al.* ("*Suzuki*"). This Supplemental Appeal Brief is directed to claims 1-8, which are reproduced in Appendix A attached hereto.

### IV. STATUS OF AMENDMENTS

No amendments to claims 1-8 have been filed subsequent to the Final Rejection dated March 16, 2004.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to a system and method for electronically formatting laboratory instrument outputs, and storing the formatted data file for extraction by one or more external monitoring facilities. In use, data indicative of the outputs of a group of laboratory instruments, such as medical analyzers and the like, is obtained by a laboratory information system.

The obtained data is transferred by the laboratory information system to an operating system, which in turn transfers the obtained data to a printer driver program. The printer driver program formats the obtained data into a desired output format, prints the data in that format to a local printer, and additionally stores the formatted output in a file for later extraction by an

external monitoring facility. The laboratory information may also provide notification to external monitoring facilities that a new data file is available.

A remote, external monitoring facility, using a computing system such as a personal computer, sever, hand-held computer, lap-top computer, or computer network, may then initiate contact with the laboratory information system and extract the desired stored data file from the system. Since the stored data file is already formatted, no additional formatting of the data is required and the external monitoring facility may simply print the extracted data file.

Independent claim 1 (and thus dependent claims 5 and 6) of the present application is directed to a method of the present invention. With reference to, *e.g.*, FIG. 3 of the present application, data indicative of outputs of the group of laboratory instruments 34 is obtained by a laboratory information system 32 and transferred to an operating system 24, transferred to a printer driver 36, formatted by the printer driver, and stored in a formatted file 37 for extraction by an external monitoring facility. Page 10, lines 19-23 of the original specification also describe the storing of the formatted data file until the external monitoring facility requests the data.

Independent claim 2 is directed to a method similar to that described in claim 1, and including a port monitor for formatting the data prior to storing the formatted data file for extraction by an external monitoring facility.

Independent claim 3 (and thus dependent claims 7 and 8 ) is directed to a system for formatting data from a group of laboratory instruments and storing the formatted file for extraction by an external monitoring facility.

Independent claim 4 is directed to a system for formatting similar to that just described for claim 3, but including a port monitor for formatting the data prior to storing the formatted data in a file for extraction by an external monitoring facility.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection to be reviewed on appeal are as follows:

Whether claims 1-8 are unpatentable under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,437,024 to *French* ("*French*") in view of U.S. Patent No. 6,665,081 to *Suzuki et al.* ("*Suzuki*").

## **VII. ARGUMENTS**

### **A. Appellant's Claims are not Obvious over *French* in view of *Suzuki***

The Examiner rejected claims 1-8 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,437,024 to *French* ("*French*"), attached hereto as Appendix B, in view of U.S. Patent No. 6,665,081 to *Suzuki et al.* ("*Suzuki*"), attached hereto as Appendix C. However, as discussed below, neither *French*, *Suzuki*, nor their hypothetical combination disclose storing formatted data for extraction by an external monitoring facility, as is required in all claims of the present application.

#### **1. *French* Does Not Disclose the Storing of Data for Extraction by an External Monitoring Facility as in the Claimed Invention**

The present application is directed to a method or system in which data is formatted and stored in a file on the laboratory information system until an external monitoring facility extracts that data from the system. Independent claims 1, 2, 3, and 4 (and thus dependent claims 5, 6, 7,

and 8) of the present invention, all require, among other things, storing the formatted data in a file for extraction by an external monitoring facility.

As described in the original application, once the data is formatted, "the data 34 is stored as a formatted file 37 in the computing environment" (original application, page 10, lines 19-20). Furthermore, the file may be stored "until the external monitoring facility requests the data" (original application , page 10, lines 20-23).

Thus, the specification and claims of the present application describe a method and system in which data is formatted, and then stored in a file until an external monitoring facility contacts the system and extracts the data from the system.

By contrast, *French* discloses only a system employing an automatic distribution system whereby formatted data is automatically sent to one or more predetermined recipients (see *French*, column 5, lines 1-5). *French* does not disclose formatted data being stored for later extraction by a remote monitoring facility. As is clearly stated throughout *French*: "databases are used to store and provide the information necessary for the distribution of hospital reports" and "a physician name table contains entries for ... intended recipients of reports". Thus, *French* discloses an automated system whereby information already at the central system is used to initiate and send a report to a predetermined recipient.

By contrast, the claims of the present application require that the laboratory system store the formatted data for extraction by a remote monitoring facility. It would be impossible for the system taught in *French* to receive a request from an external monitoring facility and allowing that facility to extract a stored data file as required and claimed in the present application.

There is absolutely no disclosure in *French* of a non-predetermined remote station initiating contact with, and extracting data from, the central system as is required in all of the claims of the present application. In fact, throughout, *French* discloses only a one-way system in which data from the central system is automatically distributed to a pre-determined group of recipients, based on information already present at the central system. *French* discloses only an automatic system that sends reports to a list of predetermined recipients, without any interaction on the part of the recipient:

"...automatically distributing the report to at least one identified intended report recipient." (*French*, abstract).

"... find a matching database entry, providing destination information for the report from the matching database entry; and in response to the provision of destination information, distributing the report to the destination corresponding to the destination information, whereby the report is distributed to the report recipient." (*French*, column 4, lines 10-17)

"The program is further operative for examining the print file for the presence of predetermined identifying indicia, and carrying out the steps of the method for locating destination for a given report contained in the database" (*French*, column 4, lines 63-68)

"The report is then automatically transmitted, for distribution, via the fax modem to one or more destinations identified in the method as intended recipients of the report" (*French*, column 5, lines 1-5)

The approach disclosed in *French* of automatically sending reports to predetermined recipients is the antithesis of the invention claimed in the present application. The claims of the present application are directed to a system and method in which the recipients of the formatted data are not pre-determined, but are self-selected, in order to receive data from the laboratory information system recipients must independently contact the system and extract the desired data file.

In the Office Action of September 1, 2004, the Examiner clearly agrees with Appellant's view that *French* does not disclose the "storing a formatted data in a file for extraction by the external monitoring facility" limitation present in all claims of the present application. In paragraph 1 of the Office Action, the Examiner cites *French* as disclosing all of the steps of claim 1 of the present application except for the "storing for extraction" step.

Appellant thus respectfully submits that *French* does not disclose storing the formatted data for extraction by an external monitoring facility, as required in all claims of the present application.

**2. *Suzuki* Does Not Disclose the Storing of Data for Extraction by an External Monitoring Facility as in the Claimed Invention**

In the Office action of September 1, 2004, the Examiner is apparently relying on *Suzuki* to supply the "storing for extraction" step he admits is missing from the disclosure of *French*, as discussed above. However, the Examiner has failed to point out just where in *Suzuki* such a disclosure is made. In fact the Examiner's entire discussion of the *Suzuki* reference is contained in four sentences of paragraph 1 of the Office Action of September 1, which Appellant reproduces here in their entirety:



*Suzuki*, on the other hand, discloses state of the art printer driver circuitry and software necessary to carry out the objectives of *French*. Because *French* is silent with regard to printer drivers and querying buffers necessary to carry out the printing and *Suzuki* discloses an existing system that would work well with a printer in *French* (*sic*). One of ordinary skill in the art at the time of the invention would have included the claimed feature as taught by *Suzuki*. The motivation of doing so would have been to save the computer memory cost (col. 12, lines 62-63, *Suzuki*) as well as to provide an efficient and quality print product in *French*.

First, Appellant is unsure whether the Examiner's discussion of *Suzuki* meets even the minimum requirements of MPEP 706.02(j) which requires, among other things, that the Examiner set forth in the Office action "the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate." Instead, the Examiner has stated only that "*Suzuki* discloses state of the art printer driver circuitry and software necessary to carry out the objective of *French*", without providing any reference to just where in *Suzuki* one may find such disclosure. Instead, Appellant is left with twenty columns of text and nineteen flow diagram figures to peruse to see if there is any relevant disclosure in *Suzuki* as asserted by the Examiner.

Second, there is, in fact, no such relevant disclosure in *Suzuki*. Since the Examiner's rejection relies on the premise that *French* discloses all of the steps of the present application except for the "storing formatted data for extraction", one would expect that the *Suzuki* reference cited by the Examiner would include such a step. It does not.

As shown best in FIG. 1 of *Suzuki*, and described in column 4, line 45 through column 5, line 9 of the *Suzuki* specification, *Suzuki* discloses a print system which includes a host computer and a page printer connected to the host. After an application program directs the start of a new print job, the host computer's API module sends data to the printer driver. The printer driver then converts the data into an output format which can be recognized by the page printer.

*Suzuki*, however, does not disclose a formatted data file being stored for extraction by an external facility as is required in all claims of the present application. In fact, there is no disclosure whatsoever of any remote facility in *Suzuki*, much less the ability of such a facility to extract data from the system of *Suzuki*. *Suzuki* discloses only a printer driver and printer in which the printer driver automatically selects the format of the plotting command to be output to the printer (*see, e.g., Abstract of Suzuki*).

Appellant thus respectfully submits that *Suzuki* does not disclose storing formatted data for extraction by an external monitoring facility, as required in all claims of the present application.

**3. The Combination of *Suzuki* and *French* Does Not Disclose the Storing of Data for Extraction by an External Monitoring Facility as in the Claimed Invention**

Since, as discussed above, *French* does not disclose the step of "storing the formatted data file for extraction by an external facility" as required in all claims of the present application, and, as discussed above, *Suzuki* does not disclose the step of storing the formatted data file for extraction by an external facility" as required in all claims of the present application, Appellant submits that the combination of *French* and *Suzuki* cannot yield the claimed invention in which the step of "storing the formatted data file for extraction by an external facility" is required. For at least this reason, the Examiner's rejection of claims 1-8 of the present application is improper, and should be reversed by this Board.

Furthermore, the Examiner's four-sentence discussion of *Suzuki* (ostensibly to show that *Suzuki* supplies the "storing/extraction" limitation missing from *French*) does not even assert that the combination of *French* and *Suzuki* would yield the claimed invention. The Examiner simply states that "*Suzuki*, on the other hand, discloses state of the art printer drive

circuitry and software necessary to carry out the objectives of *French*", and further discusses that the "feature" of *Suzuki* could have been included to save computer memory cost (paragraph 1 of Office Action). However, there is no assertion by the Examiner that the combination of *French* and *Suzuki* would actually yield the invention claimed in the present application. Appellant believes that no such assertion was made because the combination of *French* and *Suzuki* would not yield the claimed invention. The Examiner asserts only that *French* and *Suzuki* can be combined, but never asserts or shows that such a combination would yield the claimed invention. While Appellant does not necessarily agree that such a combination is proper, it is clear, as discussed above, that even hypothesizing such a combination would not lead one skilled in the art to the claimed invention.

Appellant respectfully submits that the Examiner has thus failed to meet his burden of establishing a prima facie case of obviousness with respect to any of the claims of the present application, and claims 1-8 should thus be allowed by this Board.

### VIII. SUMMARY

As discussed above, neither *French* nor *Suzuki*, nor their hypothetical combination disclose a system wherein formatted data is stored for extraction by an external facility as is required in all of the claims of the present application. Thus, the Examiner's rejection of claims 1-8 is improper, and should be reversed by this board.

Finally, Appellant notes that the present application was filed in March, 2001, and has been prosecuted through a Final Rejection, a Request for Continued Examination (RCE), a second Final Rejection, an Appeal Brief, and finally, this Supplemental Appeal Brief. Appellant respectfully submits that claims 1-8 are patentable over the cited references and should be

allowed. Accordingly, Appellant respectfully requests that the Board reverse the Examiner's rejection of claims 1-8 and permit the claims to proceed to allowance.

## IX. APPENDICES

Attached hereto are the following Appendices:

Appendix A – Claims on Appeal

Appendix B – U.S. Patent No. 5,437,024 to *French*

Appendix C – U.S. Patent No. 6,665,081 to *Suzuki et al.*

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## **APPENDIX A**

### **CLAIMS ON APPEAL**

This listing of claims 1-8 reflects the claims as currently pending in the application, and the subject of this appeal:

1. In a computer system having a laboratory information system application program, an operating system and a printer driver, a method for formatting data from a group of laboratory instruments, the method comprising:
  - obtaining data indicative of outputs of the group of laboratory instruments by the laboratory information system application program;
  - transferring the data from the laboratory information system application program, to an operating system for printing;
  - transferring the data, by the operating system, to the printer driver;
  - formatting the data, by the printer driver, into a format required by an external monitoring facility; and
  - storing the formatted data in a file for extraction by the external monitoring facility.

2. In a computer system having a laboratory information system application program, an operating system, a printer driver and a port monitor, a method for formatting data from a group of laboratory instruments, the method comprising:

obtaining data indicative of outputs of the group of laboratory instruments by the laboratory information system application program;

transferring the data, by the laboratory information system application program, to an operating system for printing;

transferring the data from the operating system to the printer driver;

transferring the data from the printer driver to the port monitor;

formatting the data, by the port monitor, into a format required by an external monitoring facility; and

storing the formatted data in a file for extraction by the external monitoring facility.

3. A system for formatting laboratory instrument output data, the system comprising:

a laboratory information system application program for receiving data outputs from one or more laboratory instruments;

an operating system operable to run the laboratory information system application program and to provide centralized printing; and

a printer driver for receiving the data to be printed out, formatting the data according to a predetermined format, and storing the formatted data in a file for extraction by an external monitoring facility.

4. A system for formatting laboratory instrument output data, the system comprising:

a laboratory information system application program for receiving data outputs from one or more laboratory instruments;

an operating system operable to run the laboratory information system application program and to provide centralized printing; and

a port monitor for receiving data to be printed, formatting the data according to a predetermined format, and storing the formatted data in a file for extraction by an external monitoring facility.

5. The method of claim 1, wherein said format required for an external monitoring facility comprises a title portion and a data portion.

6. The method of claim 5, wherein said title portion comprises a field for material title, a field for material level, and a field for material lot number, and wherein said data portion comprises a field for date, a field for time, a field for test result, and a field for unit identifier.

7. The system of claim 3, wherein said predetermined format comprises a title portion and a data portion.

8. The system of claim 7, wherein said title portion comprises a field for material title, a field for material level, and a field for material lot number, and wherein said data portion comprises a field for date, a field for time, a field for test result, and a field for unit identifier.

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## **APPENDIX B**

U.S. Patent No. 5,347,024 to *French*